

Folic acid is required for the production of DNA, which is necessary for the rapid cell growth needed to make fetal tissues and organs early in pregnancy.

Folic acid is a B vitamin. It is used in our bodies to make new cells. If a woman has enough folic acid in her body before she is pregnant, it can help prevent major birth defects of her baby's brain and spine. These birth defects are called neural tube defects or NTDs. Women need to take folic acid every day starting before they are pregnant to help prevent NTDs. The Centers for Disease Prevention and Control and the U.S. Public Health Service urge every woman who could become pregnant to get 400 micrograms (400 mcg) of synthetic folic acid every day.

What Is Folic Acid and Where Can I Get It?

Folic acid may also play a role in protecting against some forms of cancer and heart disease. Studies have shown a possible association between taking 800 mcg of folic acid daily and reduction in blood pressure.

The recommended amount to prevent spina bifida and other neural tube defects is 400 micrograms (0.4 milligram) of synthetic folic acid daily. This can be consumed in two ways:

- Take a multivitamin with 400 micrograms (0.4 mg) of folic acid every day. Multivitamins can be bought at grocery stores, pharmacies, or discount stores without a prescription.
- Eat a healthy diet that contains lots of fruits and vegetables and foods fortified with folic acid. "Enriched" cereal grain products such as pasta, rice, bread, flour, and cereals have been fortified with certain amounts of folic acid. Foods containing folic acid include fruits; green, leafy vegetables; and dried beans and legumes. Read labels to see if foods contain the folic acid you need.

Neural Tube Defects (NTDs):

Between the 17th and 30th day after conception (or 4 to 6 weeks after the first day of a woman's last menstrual period), the neural tube forms in the embryo (developing baby) and then closes. The neural tube later becomes the baby's spinal cord, spine, brain, and skull. A neural tube defect (NTD) occurs when the neural tube fails to close properly, leaving the developing brain or spinal cord exposed to the amniotic fluid. The two most common neural tube defects are anencephaly and spina bifida. Spina bifida occurs when the lower end of the neural tube fails to close. Thus, the spinal cord and back bones do not develop properly. Anencephaly is a fatal condition in which the upper end of the neural tube fails to close. In these cases, the brain either never completely develops or is totally absent. Spina bifida and anencephaly are birth defects that occur in the first four weeks of pregnancy, before most women know that they are pregnant. Because about half of all pregnancies are unplanned, it is important to include 400 micrograms of folic acid in every childbearing age woman's diet.

Resources:

March of Dimes
National Council on Folic Acid
National Institutes of Health

http://marchofdimes.com www.folicacidinfo.org http://ods.od.nih.gov/factsheets/folate.asp

For More Information:

Nebraska Department of Health and Human Services Office of Women's and Men's Health 301 Centennial Mall South - P.O. Box 94817 Lincoln, NE 68509-4817

Phone: 800.532.2227 Fax: 402.471.0913 www.dhhs.ne.gov/womenshealth and www.dhhs.ne.gov/menshealth

2011